

August 13, 2014

Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, SW Washington DC, 20554

RE: Comment on AT&T Request of Waiver Rule 22.913 County of Miami-Dade, Florida

On June 19th and 24th 2014, and as a follow up of Miami-Dade County's letter to the FCC, dated 03/24/2014 in response to the request filed by AT&T for waiver of rule section 22.913 to permit use of PSD Measurements in cellular bands in South Florida, representatives of AT&T, the Florida Department of Management Services (the State) and Miami-Dade County Radio Communication Services Division (Miami-Dade County), conducted a field test in three different AT&T cell sites as identified below:

- Site #1: AT&T FGHE located at 9566 SW 40 Street, Miami, and Fl. 33165
- Site #2: AT&T HJKW located at 15607 SW 88 Street, Miami, Fl. 33196
- Site #3: AT&T MI56 located at 4861 SW 140 Avenue, Miami, and Fl. 33175

In addition to the participation of Miami-Dade County Radio Division and the Florida Department of Management Services, the test was witnessed by representatives of Palm Beach County.

Description of the test

The test basically consisted of comparing the performance of the Miami-Dade County radio system and the State's Statewide Law Enforcement Radio System (SLERS) under the current AT&T site operating conditions ("ERP" conditions) and the performance of the same radio systems with AT&T working under the Power Spectral Density ("PSD") approach.

The Miami-Dade radio system for this test consisted of two (2) separate subsystems as per the following description:

- Harris P25 Trunking Linear Simulcast digital, operating in 851-854 MHz (downlink) and 806-809 MHz (uplink).
- Harris EDACS Trunking Simulcast analog, operating in 866-869 MHz (downlink) and 821-824 MHz (uplink). Note: Miami-Dade's EDACS sub-system will cease operations in the near future.

The identified AT&T cellular sites, which were under test, are covered by the SLERS Simulcast System (EDACS-EA) that consists of four transmit sites (Dade FP&L, Coral Reef, Okeechobee Road, and Florida City) and a control point (Miami DMS). However, the SLERS site, which really provides radio frequency coverage for those AT&T cellular locations in the simulcast system, is the Dade FP&L Site.



Representatives of Miami-Dade County Radio Communication Services Division searched for (and captured data corresponding to) potential out-of-band emissions produced by AT&T and impacting the Miami-Dade downlink bands (851-854 MHz and 866-869 MHz). Voice tests in both sub-systems were also conducted in the vicinity of the AT&T sites before and after AT&T switched to "PSD" conditions. In addition, Miami-Dade County Radio Communication Services Division collected data corresponding to the BER behavior of the portable and mobile P25 radios currently used by Miami-Dade County personnel.

The radios utilized by Miami-Dade County for voice tests were portables P7300 and MRK, and mobile M7100 radios, all from Harris Corporation.

The data corresponding to the BER behavior on the Miami-Dade County radios were captured using P7300 and M7100 radios. On the other hand, the data corresponding to the observation of potential AT&T out-of-band emissions were collected utilizing a MS2724B Anritsu Spectrum Master.

The Florida Department of Management Services (the State) conducted voice tests and also monitored the electrical (RF) noise in the downlink corresponding to the segment of frequencies where that entity operates (852-856 MHz).

For the voice test, the State utilized portable and mobile radios (Jaguar and 7300). Multiple test calls were made among SLERS field representatives located less than two hundred feet from the AT&T cellular sites under test and two other SLERS field representatives located in Tallahassee. All the test calls were loud and clear in both directions.

To monitor the RF noise, the State utilized interchangeably a P7100 Jaguar Portable and a P7300 portable radio. After establishing a noise reference level or sinad using either one of the portables and a service network analyzer, the ambient noise was injected to the setting using a magnet mount antenna. The test was done in both cases during ERP and PSD power modes. The consensus was that the difference in noise floor between ERP mode and PSD mode was insignificant.

Test Results

No significant differences were observed by either Miami-Dade County Radio Communication Services Division or the Florida Department of Management Services representatives in reference to electrical noise, BER and voice quality before or after AT&T switched from an "ERP" to a "PSD" scenario.

Conclusion

An increment in AT&T's RF power to a maximum of 1250 Watts in a 10 MHz carrier in the Cellular B band (880-890 MHz) in the three sites tested, did not produce any modification in the operating conditions of the Miami-Dade County and SLERS 800 MHz radio systems.



Recommendations

From our perspective, there is no objection to the approval of AT&T's waiver of rule section 22.9013 to permit the use of PSD measurements in AT&T sites. This consideration, however, is subject to the conditions explained in Miami-Dade's letter to the FCC regarding the AT&T waiver docket 13-202, dated March 24, 2014, Filing Proceeding # 13-202.

Please feel to contact me should have any questions concerning this update at 305-596-8098.

Sincerety,

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